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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/676,461

09/30/2003

Ehud Dafni

37590

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67801

7590

07/13/2007

MARTIN D. MOYNIHAN d/b/a PRTSI, INC.

P.O. BOX 16446

ARLINGTON, VA 22215

EXAMINER

NASSER, ROBERT L

ART UNIT

PAPER NUMBER

3735

MAIL DATE

DELIVERY MODE

07/13/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/676,461

Applicant(s)

DAFNI, EHUD

Examiner

Robert L. Nasser

Art Unit

3735

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2007.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 30-32, 34-39, 41-47, 56-65 and 67-93 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 58-65, 69-91 and 93 is/are allowed.  
6) ☐ Claim(s) 30-32, 34, 35, 39, 41-43, 47, 56, 57 is/are rejected.  
7) ☒ Claim(s) 36-38, 44-46, 67, 68 and 92 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

The examiner notes that he is new to this case and regrets that upon an update search that new art was found and deemed pertinent to claim 30. Accordingly, the following non-final action is being issued.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 30-31, 34-35, 39, 41-43, 47, 56, and 57 are rejected under 35

U.S.C. 102(a) as being anticipated by Miele 6554774. Miele teaches with respect to figure 12 and column a device including a measurement cuff (see column 9, line 43), a controller that cause the cuff to undergo a applanation sweep from under pressure to overpressure (see figure 4), which pressures include a pressures between systolic and diastolic, the system then has a measuring unit which uses the pressure to determine a transfer function for the change in diameter vs applied pressure, which inherently requires repeated calculation of the arterial diameter and comparing multiple values to determine the transfer function. The examiner notes that the system is capable of applying a pressure where the artery collapses during diastole. Claim 31 is rejected in that Miele includes a pump. Claim 34 is rejected in that the cuff is applied circumferentially around the arm. Claim 35 is rejected in that the cuff is capable of being applied as recited in the claim. The examiner notes that the claim is a recitation of intended use and is met if the reference is capable of the use. Claim 39 is rejected in that the applanation sweep occurs over 5 or more cycles. Claim 41 is rejected in that at

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least one of the pressures is substantially equal to mean pressure. Claims 42 and 43 are rejected in that the pressure is continuously decreasing and as such, different pressures are applied in each measurement round. Claim 47 is rejected in that the cuff is disposable. Claims 56 and 57 are rejected in that the cuff is capable of applying a stimulus and does indeed occlude the artery.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miele. The exact pump would have been a mere matter of design choice for one skilled in the art.

Claims 36-38, 44-46, 67, 68, and 92 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 36 and 37 define over the art in that none of the art measures impedance in addition to the features of claim 30. Claim 38 defines over the art in that none of the art has one round prior to stimulus and one after, as recited in the claim. Claims 44 and 45 are rejected in that none of the art determines the change over a single cardiac cycle, in combination with the other features of claim 30. Claim 46 defines over the art of record in that none of

the art finds the maximum difference, as claimed. Claim 67 defines over the art in that none of the art has the controller adapted to administer a drug as a stimulus. Claim 68 defines over the art of record in that none of the art determines the endothelial score from an impedance measurement, as claimed. Claim 92 defines over the art in that none of the art determines the endothelial score, as claimed.

Claims 58-64 are allowable. Claims 58-64 define over the art in that none of the art has two measurement cuffs in combination with the other features of the claims. Bratteli 6733461 has two cuffs, applies pressure to the artery between systolic and diastolic and determines an value of arterial cross sectional area. However, it does not compare the values over multiple measurement cycles. In addition, none of the art provides motivation for the comparison.

Claims 65 and 69-91, and 93 are allowable. Claims 65, 68-91 and 93 define over the art in that none of the art determines an endothelial score from an impedance measurement, as claimed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

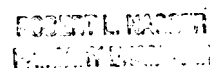
Silber et al 6654628 teaches that the changes in diameter before during and after cuff inflation can be used to determine endothelial function. It does not state what the cuff is inflated to. To the best of the examiner's knowledge, the inflation pressure is above systolic to include reactive hyperemia, such as in Hayano 7131149.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert L. Nasser whose telephone number is 571 272-4731. The examiner can normally be reached on m-f 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor II can be reached on 571 272-4730. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Robert L. Nasser  
Primary Examiner  
Art Unit 3735



RLN  
July 6, 2007